

ABSTRACT

An apparatus for irradiation of a fluid with UV light includes a tubular body consisting of UV-permeable material. The body includes a fluid chamber and openings for passage of fluid. A UV source is provided to subject the chamber to the UV light. Light baffles define an irradiated section of the chamber to prevent light penetration beyond the irradiated section while permitting the fluid to flow through. The apparatus is provided as a component in a housing having a modular design. The modules include a back cover for surface mounting. The body is mounted to the back cover. An inner cover is attached to the back cover. The inner cover includes the UV source and modular electronics. A front cover is attached to the inner and back cover. Heat sink elements are provided to control the heat produced in the apparatus.